

REMARKS

Claims 1-23 are pending in this patent application. Reconsideration of the rejections in view of the remarks below is requested.

Applicant appreciates the Examiner's indication that claims 14 and 17-19 are allowed. However, Applicant respectfully submits that claims 1-13, 15, 16 and 20-23 are patentable for at least the reasons provided below.

The Office Action summary does not reference whether the drawings were accepted. Applicant kindly requests again an indication in the next action whether the drawings are acceptable.

Response to Examiner's Arguments

In response to Applicant's arguments, the Examiner indicated that "Katsumura discloses using ultraviolet radiation in col. 5, lines 45-50." Office Action, page 2, last paragraph. Respectfully, Applicant disagrees with the significance of Katsumura et al.'s reference to "ultraviolet radiation". Applicant submits that the cited portions of Katsumura et al. do not disclose, teach or suggest exposing a part of a resist layer on a substrate to ultraviolet radiation and applying an electric field across the resist, the direction of the field being substantially perpendicular to a plane of the resist layer during the exposing as recited in claim 1.

Col. 5, lines 45-50 of Katsumura et al. is reproduced below:

Note that the light transmittance described above refers to the characteristic to pass therethrough light radiated from a light emitting element such as a semiconductor laser and a light emitting diode, light of all the wavelengths including visible light, ultraviolet light, and infrared light, or light of a particular wavelength among these kinds of light.

Applicant submits that this excerpt does not disclose that ultraviolet radiation is used to expose a resist layer. Rather, it merely refers to a characteristic of the substrate holding the resist of Katsumura et al. ("an insulating substrate 4a formed of glass material having light transmittancy"). Indeed that light transmittancy is important in the context of Katsumura et al. for a completely different purpose than exposing a resist layer, namely inspection of the master disc. In this regard, Applicant refers Examiner to col. 1, lines 13-40 of Katsumura et al. reproduced below:

In order to manufacture a master disc (information recording medium used as a master copy) to fabricate such a high density information recording medium, a master disc recording method using an electron beam has been proposed in place of a mastering technique using a laser beam.

According to the mastering technique for master disc recording using an electron beam, electron beam resist (hereinafter referred to as "EB resist") is applied on an insulating substrate formed of a glass material having light transmittancy, an electron beam having its spot size reduced is directly irradiated upon the EB resist to perform exposure (electron beam exposure), and the exposed part of the EB resist is removed away by development processing to form pits representing information to be recorded.

Then, in order to evaluate the manufactured master disc, a laser beam having a prescribed wavelength and a reduced spot size is allowed to come in from the side of the insulating substrate, light returned from a recording surface is optically detected and an evaluation for example as to whether the pits or the like are appropriately formed on the recording surface is performed.

As described above, in the mastering technique to which the electron beam exposure is applied, the manufactured master disc must be optically evaluated, and therefore an insulating substrate made of a glass material which is transparent to light, in other words, a material which passes light therethrough is used.

As can be seen from this excerpt, Katsumura et al. disclose that their master disc process relates to electron beam recording, rather than (ultraviolet) light recording, and that the purpose of the (ultraviolet) light transmittancy of the substrate is for measurement of pits on the recording surface, rather than for exposing a resist layer. Thus, Applicant respectfully submits that Katsumura et al. clearly fail to disclose, teach or suggest the claimed invention of claim 1.

The Examiner further indicated that "Applicant also argues that Katsumura does not disclose suing [sic] a lithographic process; however, using the method in a lithographic process is merely an intended use in the preamble of the claim and patentable weight is not given." Applicant cannot identify in their Amendment filed January 19, 2006 any such argument. Examiner is kindly requested to identify such an argument in Applicant's Amendment filed January 19, 2006. Indeed, Applicant submits that it has not argued for the patentability of the claims based on language in the preamble of any of the claims but rather has only argued with respect to language in the body of the claims.

Furthermore, Applicant submits that the Examiner has not rebutted Applicant's arguments for the patentability of independent claims 15 and 16, as the above comments are non-responsive to those arguments. For example, Applicant argued that Katsumura et al. fail to disclose, teach or suggest that the resist material itself incorporates a conductive material

as recited in claim 15 and that Katsumura et al. fail to disclose, teach or suggest a radiation sensitive and conductive resist material as recited in claim 16. Examiner has not identified why those arguments are not persuasive. Moreover, Examiner has failed in this Office Action and the Office Action mailed November 3, 2005 to clearly explain the pertinence of Katsumura et al. to claims 15 and 16 pursuant to 37 CFR §1.104(c)(2). There simply has been no reference to the claim language of those claims in this Office Action or the Office Action mailed November 3, 2005 to identify the pertinency of Katsumura et al. to those claims.

Rejection under 35 U.S.C. §102

The Office Action rejected claims 1-13, 15, 16 and 20-23 under 35 U.S.C. §102(b) as being anticipated by U.S. patent no. 6,307,826 to Katsumura et al. ("Katsumura et al."). Applicant respectfully traverses the rejection, without prejudice.

Applicant respectfully submits that the cited portions of Katsumura et al. fail to disclose, teach or suggest a method of fabricating a device using a lithographic process comprising, *inter alia*, exposing a part of a resist layer on a substrate to ultraviolet radiation and applying an electric field across the resist, the direction of the field being substantially perpendicular to a plane of the resist layer during the exposing as recited in independent claim 1.

As discussed in more detail above, Katsumura et al. merely disclose an electron beam recorder for recording a master disc (e.g., for a DVD) (Katsumura et al, col. 4, lines 44-45). The cited portions of Katsumura et al. however fail to disclose exposing a part of a resist layer on a substrate to ultraviolet radiation as recited in claim 1 since Katsumura et al. merely disclose exposing resist with an electron beam. Thus, the cited portions of Katsumura et al. fail to disclose, teach or suggest claim 1.

Further, Applicant respectfully submits that the cited portions of Katsumura et al. fail to disclose, teach or suggest a method of fabricating a device using a lithographic process comprising, *inter alia*, applying a radiation sensitive resist on top of the device, the resist material incorporating a conductive material as recited in independent claim 15.

While not clearly identified in any manner, the Office Action appears to refer to col. 5, line 33 to col. 6, line 8 as disclosing the invention of claim 15. Applicant respectfully disagrees. Katsumura et al. merely disclose an ITO film 4b disposed over electron beam resist 4c wherein the ITO film 4b is set at the ground potential of the electron beam recorder.

However, Katsumura et al. fail to disclose, teach or suggest that the resist material itself incorporates a conductive material as recited in claim 15.

Applicant also respectfully submits that the cited portions of Katsumura et al. fail to disclose, teach or suggest a method of processing a device using a lithographic process wherein, *inter alia*, said device comprises a radiation sensitive and conductive resist material as recited in independent claim 16.

As discussed above, Katsumura et al. merely disclose an ITO film 4b disposed over electron beam resist 4c wherein the ITO film 4b is set at the ground potential of the electron beam recorder. However, Katsumura et al. fail to disclose, teach or suggest a radiation sensitive and conductive resist material as recited in claim 16.

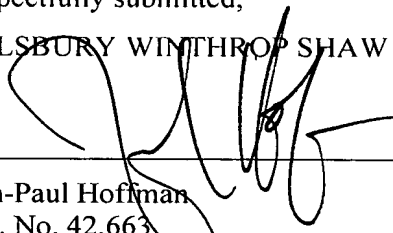
Therefore, for at least the above reasons, the cited portions of Katsumura et al. fail to disclose, teach or suggest all the features recited by independent claims 1, 15 and 16. Claims 2-13 depend from independent claim 1 and are, therefore, patentable for at least the same reasons provided above related to claim 1, and for the additional features recited therein. Further, claims 20-21 depend from independent claim 15 and are, therefore, patentable for at least the same reasons provided above related to claim 15, and for the additional features recited therein. Also, claims 22-23 depend from independent claim 16 and are, therefore, patentable for at least the same reasons provided above related to claim 16, and for the additional features recited therein. As a result, Applicant respectfully submits that the rejection under 35 U.S.C. §102(b) of claims 1-13, 15, 16 and 20-23 in view of Katsumura et al. should be withdrawn and the claims allowed.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance. If questions relating to patentability remain, the Examiner is invited to contact the undersigned to discuss them.

MICKAN ET AL. -- 10/823,775  
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Should any fees be due, please charge them to our deposit account no. 03-3975, under our order no. 081468/0309171. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced deposit account.

Respectfully submitted,  
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